

Appl No.: 10/765,729

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UCF449CIP**REMARKS/ARGUMENTS**

Favorable consideration of this application is respectfully requested. Applicant has rewritten claims 1, 6, 9, 11, 18 24 and canceled claims 5, 10, 15-17, 36 and 39-59, and added new claims 60-71. The novel shaped leading and trailing edges and tip ends in new claims 60-71 are described in the specification on at least page 38, lines 18-20 in reference to Figures 32-36 and on page 43, lines 17-19 in reference to Figures 37-41. The amendment to the specification is to correct a typographical error. Favorable reconsideration of this application is, consequently, earnestly solicited in view of the following remarks.

As to the restriction requirement, applicant has canceled the nonelected claims, and reserves the right to file additional divisional applications in the future.

Claims 1-4, 6-9 and 11-14 were rejected under sec. 102b as being anticipated by or under sec. 103 as being obvious over Tolbert '476. Independent claim 1 has been amended to include the novel "twisted" feature of dependent claim 5. Independent claim 6 has been amended to include the novel "twisted" feature of dependent claim 10. Independent claim 11 has been amended to include the novel "twisted" feature of dependent claim 15. These features are clearly not described, taught or suggested by Tolbert.

Additionally, the subject invention claims the benefit of priority and has similar claims to those claimed in parent application Serial No. 10/400,888 which has now been allowed as patent 7,014,423. The Tolbert reference was cited in the parent application as well, and was deemed to be allowable. Tolbert should be removed for at least the same reasons given in the parent patent application.

The rejection states that "Tolbert.....disclose a HVAC system with control to blower motor....to selectively control the fan speed."

The subject application is not directed toward selectively controlling the speed of the fan to generate the appropriate CFM by the power of the motor. Conversely, the subject application includes rotating twisted blades about a hub for increased CFM with a reduction in power of the motor (pages 8-11, and pages 38-50).

Appl No.: 10/765,729

Atty. Dkt.
UCF449CIP

According to Tolbert, optimum motor efficiency is achieved by selectively operating the motor at full load or partial load based on the condition of the space to be treated (Col. 8, lines 13-27). For example, at full load the system uses an input power of 400 watts to produce an airflow of about 1000 cfm and when the system is operated at partial load, an airflow of about 600 cfm is achieved with an input power of 100 watts (col. 7, lines 39-44).

Claims 1 of the subject application claim an airflow of approximately 1900 cfm produced by rotating the fan at approximately 850 rpm with an input power of approximately 110 watts. The other independent claims and dependent claims have similar novel cfm and rpm combinations.

A comparison of the 1000 cfm airflow achieved using the electrical control system of Tolbert that requires an input power of about 100 watts with the results achieved by the subject application as claimed in claim 1 (1900 cfm with 110 watts) illustrates the significant difference between motor efficiency (Tolbert) and airflow efficiency (subject application). In fact, the system disclosed in Tolbert requires an increase in input power to achieve an increase in airflow. Using the example provided in Tolbert at column 7, lines 39-44, to increase the airflow from about 600 cfm to about 1000 cfm, the input power was quadrupled from 100 watts to 400 watts, suggesting that a significantly higher input power is required to achieve the airflow of the novel claims.

The rejection further states that "It's well know to drive the fan in different speeds, RPM to generate appropriate CFM by the power of the motor.....it is a design choice depending on the capacity and efficiency requirements...."

Using the examples disclosed by Tolbert, the input power of the motor required to achieve the airflow of claim 1 (1930cfm(and other novel claimed cfm values) would be significantly greater than 1000 watts.

Tolbert does not recognize increasing the airflow at decreased input power as claimed in the subject claims. Conversely, the system disclosed by Tolbert automatically reduces the airflow when operated a partial load in order to reduce the input power.

Thus, removal of this rejection is respectfully requested.

Appl No.: 10/765,729

Atty. Dkt.
UCF449CIP

Claims 5, 10, 15, 18-23, 24-35, 37 and 38 were rejected under sec. 103 as being unpatentable over Tolbert in view of Egawa '118. The Egawa reference does not overcome the deficiencies to Tolbert mentioned above.

Egawa requires the use of blades having a twist angle of some "90" degrees at the tip end, "P3, P4" and a much smaller twist angle of some "40 - 50" degrees at the root end "P1", as shown in Figure 1B, and described in columns 2 and 3. Additionally, Egawa requires their airflow be discharged in a "radial direction", abstract, as clearly shown in Figures 2, 3 and 4C.

Applicant's invention has nothing to do with a "radial direction" airflow and instead claims an "axial" type airflow which is substantially different than Egawa. Applicant's invention describes and claims substantially different twisted blade configurations. Independent claims 1, 6, 11, 24 have now been amended to clarify that the "axial airflow" is generated from twisted blades where the "the root end..(has) a root angle of twist that is greater than a tip angle of twist at the tip end...", the limitations of which were found in former dependent claims 5, 10, 15. No where does Egawa describe, teach or suggest these claimed features.

Additionally, the Egawa reference was cited in the parent application as well, and similar features were deemed to be allowable. Egawa should be removed for at least the same reasons given in the parent patent application. Thus, removal of this reference is respectfully requested.

Claims 1-15, 18-35 37 and 38 were rejected under sec. 103 as being unpatentable over Martin '966. Applicant strongly disagrees with the statements that "In regard to the motor and twisted blade, the Examiner takes the official notice that the PSC motor and twisted blades are well known in the prior art and fan size and blade arrangement are design choice. Based on the art of record, the specific "twisted blade(s)" claimed by the applicant having "root end(s)" with a greater degree of "twist" than "tip end(s)", is clearly NOT shown by the art of record. The examiner believes that these statements of "official notice" as being "well known" are clearly in error. The references cited specifically, Tolbert and Egawa have no such teachings and descriptions.

It is clear error for the examiner to ignore any of the features of the claims. Under the rules of the MPEP, if the applicant requests the examiner cite the reference(s)

Appl No.: 10/765,729

Atty. Dkt.
UCF449CIP

showing each and every one of the references that supports a rejection, the examiner must cite the reference or remove the rejection. Under the patent rules, applicant requests the examiner specifically point out which uncited reference(s) describes and teaches these unsubstantiated opinions and assertions raised in the rejection that the entire invention is obvious under sec. 103. Under the patent rules, the examiner must cite the reference(s) that shows these unsubstantiated opinions and assertions mentioned in their rejection, or remove the 103 rejection for at least these reasons alone.

In addition, MPEP section 706.04 states that full faith and credit should be given to the action of a previous examiner unless there is clear error in the previous action or knowledge of other prior art. The examiner should not take an entirely new approach or attempt to reorient the point of view of a previous examiner in mere hopes of finding something. *Amgen Inc. v. Hoechst Marion Roussel, Inc.* 126 F. Supp. 2d 69, 139, 57 USPQ 2d 1449(D-Mass 2001).

Arguably, it might be "obvious to try" to test whether to use "twisted blades" and "PSC" motors, and operating parameters as claimed by applicant. However, Examiner is well aware that "obvious to try" is not the standard for determining inventiveness. See also *In re Kaplan*, 789 F. 2d at 1580, 229 U.S.P.Q. at 683, where the court held:

"In effect, what the Board did was to use a disclosure of appellants' own joint invention which had been incorporated in the Kaplan sole disclosure to show that their invention was but an obvious variation of Kaplan's claimed invention. That amounts to using an applicant's invention disclosure, which is not a 1-year time bar, as prior art against him. That is impermissible."

The mere fact that someone in the art can rearrange parts of a reference device to meet the terms of a claim is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for someone of ordinary skill in the art, without the benefit of the inventor's specification to make the necessary changes in the reference device. *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984).

There is no teaching, nor suggestion for modifying the references of record to include all the novel features of the amended claims. Under well recognized rules of the MPEP (for example, section 706.02(j)), the teaching or suggestion to make the claimed

Appl No.: 10/765,729

Atty. Dkt.
UCF449CIP

combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaack, 947 F.2d 488, 20 USPQ2d 1438(Fed. Cir. 1991).

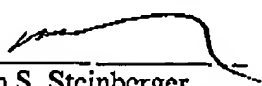
Claims 1-15, 18-35, 37 and 38 were provisionally rejected under the judicially created doctrine of obviousness type double patenting as being rejected over Serial No. 10/400,888 which is now U.S. Patent 6,314,115 to the same assignee as that of the subject invention.

Applicant has filed a terminal disclaimer with the subject amendment response. Thus, removal of this rejection is respectfully requested.

Applicant contends the references cannot be modified to incorporate the features of subject claims 1-4, 6-9, 11-14, 18-35, 37-38 and the novel claims of newly added claims 60-71 without utilizing Applicant's disclosure. The courts have consistently held that obviousness cannot be established by combining the teachings of the prior art to Applicant to produce the claimed invention, absent some teaching, suggestion, incentive or motivation supporting the combination. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

In view of the foregoing considerations, it is respectfully urged that claims 1-4, 6-9, 11-14, 18-35, 37-38 and the novel claims of newly added claims 60-71 be allowed. Such action is respectfully requested. If the Examiner believes that an interview would be helpful, the Examiner is requested to contact the attorney at the below listed number.

Respectfully Submitted;


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